

Title of Intervention: Community-wide reminder, recall and outreach system

Intervention Strategies: Individual Education, Supportive Relationships, Environments and Policies

Purpose of the Intervention: To increase immunization rates

Population: 0 to 2 year old children and their parents

Setting: Large city health practices in Monroe County, New York; community-based, health care facility-based

Partners: Health care practices, research team, Strong Memorial Hospital's Social Work Department

Intervention Description:

- Supportive Relationships: Lay community-based outreach workers assigned to city practices tracked immunizations rates of all 0 to 2 year olds and provided a staged intervention with increasing intensity depending on the degree to which children were behind in immunizations. A small number of children for whom multiple reminders failed received home visits from lay health outreach workers to address barriers to care.
- Individual Education: Participants received a letter, postcard or telephone immunization reminders.
- Environments and Policies: Health care facilities implemented a tracking system to assess immunization compliance.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Lay community-based outreach workers, project leaders
- Training: Materials for training outreach leaders to follow a strict reminder/recall protocol
- Technology: Not mentioned
- Space: Not mentioned
- Budget: The cost of the entire program was \$240,000 a year including 70% salary for outreach workers and the remainder for supervisory personnel, computer and administrative support, local travel, phone, and other expenses for outreach workers. The cost was \$38 per child or \$3.12 per child per month.
- Intervention: Phones, transportation, postcards, letters, envelopes, postage, access to medical charts and patient lists, established intervention protocol, tracking system
- Evaluation: Standardized abstraction forms for review of medical charts, medical charts

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
 - Immunization rates were determined through individual medical chart reviews with data recorded on a standardized abstraction form
 - Demographic and specific immunization data were recorded

Outcomes:

- Short Term Impact: Immunization rates rose steadily throughout the entire county. Previously statistically significant differences between the inner city and suburbs were eliminated. Previous racial and ethnic disparities in immunization rates were reduced significantly. Tracking with outreach significantly decreased immunization delay.
- Long Term Impact: Tracking with outreach significantly increased immunization coverage.

Maintenance: Not mentioned

Lessons Learned: The study found that extending a reminder, recall, and outreach intervention for childhood immunization to the majority of children residing in a large city was associated with a marked reduction of disparities in immunizations rates between city children and suburban children and between white children and black or Hispanic children. The study suggests that targeting primary care practices that serve geographic

areas where minority children reside may reduce or eliminate racial and ethnic disparities without the need for differential interventions according to race or ethnicity. Immunization registries may help to reduce immunization disparities on a community level if they are combined with systematic reminder, recall and outreach interventions. The intervention not only increased immunization rates but also had a beneficial spillover effect by increasing health supervision visits and preventive screening for anemia and lead poisoning, thus providing additional benefits beyond immunization delivery.

Citation(s):

Rodewald, L.E., et al., A randomized study of tracking with outreach and provider prompting to improve immunization coverage and primary care. *Pediatrics*, 1999. 103(1): p. 31-8.

Szilagyi, P.G., et al., Reducing geographic, racial, and ethnic disparities in childhood immunization rates by using reminder/recall interventions in urban primary care practices. *Pediatrics*, 2002. 110(5): p. e58.